AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/751,484

Attorney Docket No.: Q77658

## **REMARKS**

Reconsideration and allowance of the subject application are respectfully requested. By this Amendment, Applicant has amended independent claim 1 and 11. Upon entry of this Amendment, claims 1-17 are all the claims pending in the application. In response to the Office Action, Applicant respectfully submits that the claims define patentable subject matter.

## I. Overview of Office Action

Claims 1, 2, 5, 11, 12, and 15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Richards et al. (U.S. Patent No. 6,539,213, hereafter "Richards"). Claims 3 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards in view of Ozluturk et al. (U.S. Patent No. 7,072,380, hereafter 'Ozluturk"). Claims 4 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards in view of Dress, Jr. (U.S. Patent No. 6,603,818, hereafter "Dress"). Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards in view of Barnes et al. (U.S. Patent Application Publication No. 2002/0175850, hereafter "Barnes"). Claims 7-10 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards in view of Barnes and further in view of Takamura (U.S. Patent Application Publication Publication No. 2003/0035465). Claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Richards in view of Walker et al. (U.S. Patent Application Publication No. 2004/0048574, hereafter "Walker").

## II. Preliminary Matters

## A. Information Disclosure Statement

Applicant thanks the Examiner for initialing and returning a copy of the PTO/SB/08 form submitted with the Information Disclosure Statement filed on May 15, 2007.

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q77658

Application No.: 10/751,484

III. Prior Art Rejections

The Examiner alleges that Richards discloses all of the features of independent claims 1 and 11. Applicant respectfully disagrees with the Examiner's position.

Amended independent claim 1 and analogous independent claim 11 recite in part:

a receiver configured to calculate channel information from a UWB pulse signal received over a UWB channel so that a UWB channel condition can be predicted and a data transmission scheme is changed according to the calculated channel information, whereby information transmission can be efficiently made according to the UWB channel condition,

wherein a channel coding rate, modulation order and transmission power is changed according to the data transmission scheme.

Applicant respectfully submits that there is no teaching or suggestion in Richards that a channel coding rate, modulation order <u>and</u> transmission power are changed according to the data transmission scheme, as required by the claims.

Richards discloses a system for impulse radio power control comprising a transceiver 902, which comprises a receiver (the Examiner appears to read the claimed receiver on parts 702, 1011, 1116, 1014, 1124, and 1126 of FIG. 11) configured to calculate channel information from an ultra wideband (UWB) pulse signal received over a UWB channel (Richards appears to disclose that a signal evaluation stage (1011) determines a measure of the signal strength, received noise, and SNR (column 15, lines 52-62) so that a UWB channel condition can be predicted (column 15, lines 52-62), and a data transmission scheme (which the Examiner appears to read on the power control algorithm) is changed according to the calculated channel

8

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/751,484

Attorney Docket No.: Q77658

information (column 15, line 60 to column 16, line 12), whereby information transmission can be efficiently made according to the UWB channel condition.

However, Richards does not disclose that a channel coding rate, modulation order and transmission power are changed according to the data transmission scheme.

Further, Ozluturk, Dress Jr., Barnes, Takamura and Walker do not cure the deficiencies of Richards.

Accordingly, Applicant respectfully submits that claim 1 and 11 should be allowable because the cited references do not teach or suggest al of the features of the claims. Claims 2-10 and 12-17 should also be allowable at least by virtue of their dependency on independent claims 1 and 11.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/751,484

Attorney Docket No.: Q77658

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Mark E. Wallerson Registration No. 59,043

SUGHRUE MION, PLLC Telephone: (202) 293-7060

Facsimile: (202) 293-7860

washington office 23373 customer number

Date: November 28, 2007